

IN THE CLAIMS:

1. (Previously Presented) A communication system for communication using wireless signals, the system comprising:
 - a plurality of transceiver stations configured to transmit and receive wireless signals over broadcast channels and dedicated channels, said wireless signals including down-link signals to and up-link signals from mobile stations;
 - a plurality of measurement units each configured to form measurements of said wireless signals; and
 - a plurality of zone managers, various ones of which are connected to one another to form a zone network, wherein each zone manager includes:
 - a processor configured to process measurements formed by one or more of said plurality of measurement units to determine preferred ones of said plurality of transceiver stations for use in transmitting wireless signals associated with a particular mobile station over one or more particular dedicated channels, wherein transmission over the particular dedicated channels for the particular mobile station includes the use of a first radio resource ; and
 - a control unit configured to dynamically switch between said preferred ones of said plurality of transceiver stations during said transmitting wireless signals associated with the particular mobile station over the one or more particular dedicated channels, wherein said dynamic switching occurs without changing the first radio resource.
2. (Previously Presented) The communication system of claim 1, wherein each of said plurality of measurement units is configured to form said measurements of said up-link signals from said particular mobile station.
- 3-5. (Canceled)
6. (Previously Presented) The communication system of claim 1, wherein said dynamic

switching occurs in less than 1 second.

7. (Canceled)
8. (Previously Presented) The communication system of claim 1, wherein each of said plurality of zone managers is associated with a corresponding one of said plurality of transceiver stations.
9. (Previously Presented) The communication system of claim 8, wherein each of said plurality of zone managers is co-located with its corresponding transceiver station.
10. (Canceled)
11. (Previously Presented) The communication system of claim 8, wherein two or more of said plurality of zone managers are co-located.
12. (Previously Presented) The communication system of claim 11, wherein said two or more of said plurality of zone managers are co-located at a base station controller in a cellular system.
13. (Previously Presented) The communication system of claim 8, wherein said plurality of zone managers includes one zone manager designated as a host zone manager for said particular mobile station and one or more additional ones of the plurality of zone managers designated as assistant zone managers for said particular mobile station, wherein said host zone manager is operative to communicate over said particular broadcast channels with said particular mobile station while said particular dedicated channels for said particular mobile station are dynamically switched among said one or more assistant zone managers and said host zone manager.

14. (Currently Amended) The communication system of claim 13, wherein each of said plurality of measurement units is associated with a corresponding one of said plurality of zone managers, wherein those ones of the plurality of measurement units that are associated with said host and assistant zone managers [[is]] are configured to form measurement of said up-link traffic signals from said particular mobile station, wherein said measurements include one or more of the following types of measurements: signal strength measurements, error rate measurements, distance measurements indicating a distance between the particular mobile station and one of the plurality of transceiver stations.
15. (Previously Presented) The communication system of claim 14, wherein, each of said plurality of transceiver stations include:
one of a plurality of broadcasters configured to broadcast said down-link signals;
and
one of a plurality of collectors configured to receive said up-link signals;
wherein said processor of said host zone manager is coupled to receive measurements from the one of the plurality of measurement units associated with the host zone manager and configured to process said measurements to determine preferred ones of said plurality of broadcasters and preferred ones of said plurality of collectors for said particular dedicated channels for communications with said particular mobile station; and
wherein said control unit of said host zone manager is configured to dynamically select said particular dedicated channels for said particular mobile station by selecting said preferred ones of said broadcasters to provide particular down-link signals and said preferred ones of said collectors to receive particular up-link signals for said particular mobile station.
- 16 - 24. (Canceled)
25. (Previously Presented) The communication system of claim 1, wherein each of said plurality of zone managers corresponds to one of said plurality of transceiver

- stations, wherein each of said plurality of zone managers includes:
- a resource manager configured to manage available resources in said communication system;
 - an airlink controller configured to control radio channels in said communication system.
26. (Previously Presented) The communication system of claim 25, wherein each of said plurality of zone managers includes a zone manager-to-zone manager interface unit configured to provide an interface to each of one or more other ones of the plurality of zone managers.
27. (Previously Presented) The communication system of claim 25, wherein each of said plurality of zone managers includes a transceiver interface configured to provide an interface to its corresponding transceiver station.
28. (Previously Presented) The communication system of claim 25, wherein said communication system includes a controller link configured to provide an interface between a base station controller and a subset of said plurality of transceiver stations and said plurality of zone managers.
29. (Canceled)
30. (Previously Presented) The communication system of claim 25, wherein one or more of said plurality of zone managers ~~is~~ are integrated into one or more of said transceiver stations.
31. (Previously Presented) The communication system of claim 1, wherein said control unit is configured to issue:
- broadcaster commands for controlling the down-link signals to a first set of said mobile stations, and
 - collector commands for controlling a plurality of collectors for changing the up-

link signals for each of a second set of said mobile stations,
wherein none of said first set of said mobile stations is in said second set of said
mobile stations and vice versa.

32. (Previously Presented) The communication system of claim 1, wherein said wireless signals employ multiple access protocols.

33. (Previously Presented) The communication system of claim 32, wherein said multiple access protocols include one or more of the following protocols: TDMA, CDMA, SDMA, and FDMA.

34-36. (Canceled)

37. (Previously Presented) The communication system of claim 1, wherein each of said plurality of transceiver stations is configured to communicate over a region containing one or more zones, and wherein said measurements formed by said plurality of measurement units includes measurements of wireless signals received by one or more collectors in each of said plurality of transceiver stations.

38. (Previously Presented) The communication system of claim 37, wherein said measurements from said one or more collectors in each of said plurality of transceiver stations include indications of radio link conditions between a mobile station and said one or more collectors.

39. (Previously Presented) The communication system of claim 38, wherein said radio link conditions include one or more of the following: path loss, forward error rates, carrier to interference ratio.

40-42. (Canceled)

43. (Previously Presented) The communication system of claim 1, wherein said plurality of zone managers includes a host zone manager and one or more assistant zone managers and wherein said host zone manager is configured to process said measurements from the one or more assistant zone managers to derive processor information for determining said preferred ones of said plurality of transceiver stations.
44. (Canceled)
45. (Currently Amended) The communication system of claim 43, wherein said processor information includes one or more of the following types of information: priority levels for the communication links with ~~mobiles~~ mobile stations, timing and synchronization information, transmit power level, ~~and~~ locations of mobile stations.
- 46-48. (Canceled)
49. (Currently Amended) The communication system of claim 1, wherein each of said plurality of transceiver stations include broadcaster controllers configured to control broadcaster transmitters [[and]] and further configured to select one or more broadcaster transmitters for forward communications with mobile stations.
50. (Previously Presented) A method, comprising:
transmitting, from a plurality of transceiver stations, downlink wireless signals over broadcast channels and dedicated channels ;
receiving, at said plurality of transceiver stations, uplink wireless signals transmitted from mobile stations;
forming measurements of said uplink wireless signals;
processing said measurements to determine preferred ones of said transceiver stations for particular dedicated channels for a particular mobile station;
and
dynamically switching between said preferred ones of said plurality of transceiver

stations during transmitting downlink wireless signals to said particular mobile station, wherein a radio resource used for said particular dedicated channels for said particular mobile station remains unchanged as a result of said dynamically switching.

51. (Previously Presented) The method of claim 50, further comprising measuring said up-link signals from said particular mobile station to form said measurements.

52. (Previously Presented) The method of claim 50, wherein said dynamically switching occurs in less than one second.

53-56. (Canceled)

57. (Currently Amended) A communication system for providing wireless communications with mobile devices, the system comprising:

a plurality of transceiver stations configured to communicate with mobile devices, wherein each of the plurality of transceiver stations is configured to communicate via broadcast channels and dedicated channels, wherein one of the plurality of transceiver stations is designated as a host transceiver station for a first mobile device, and wherein the host transceiver is configured to provide the broadcast channels for communication with the first mobile device; and

a plurality of processors each associated with a corresponding one of said plurality of transceiver stations, to wherein one of the plurality of processors associated with the host transceiver station is configured to act as a host zone manager for the first mobile device, wherein the processor associated with the host zone manager is [[is]] configured to dynamically switch between selected ones of the plurality of transceiver stations to provide the dedicated channels for communications with the first mobile device, wherein the dynamic switching does not affect the host transceiver providing the broadcast channels, and wherein a radio resource used for the

dedicated channels for the first mobile device remains unchanged as a result of the dynamic switching.

58. (Canceled)

59. (Previously Presented) The system of claim 57, wherein said processor associated with the host zone manager is configured to:

receive signal measurements from at least a subset of said plurality of processors, wherein the signal measurements are measurements of up-link signals from the first mobile station;

process the received signal measurements in order to form processed signal measurements; and

dynamically switch between the selected ones of the plurality of transceiver stations based on the processed signal measurements to provide the dedicated channels for the first mobile device.

60 - 62. (Canceled)

63. (Previously Presented) The system of claim 57, wherein the system is configured such that a first set of the plurality of transceiver stations is configured to provide uplink communications with the first mobile device and a second set of the plurality of transceiver stations is configured to provide downlink communications with the first mobile device.

64. (Previously Presented) The system of claim 57, wherein a first subset of the plurality of transceiver stations is configured to provide traffic signals to the first mobile device and a second subset of the plurality of transceiver stations is configured to provide control signals to the first mobile device.

65-84. (Canceled)

85. (Currently Amended) A method of operating a communication system using wireless down-link signals to and wireless up-link signals from mobile stations, comprising:
- dynamically switching between preferred ones of a plurality of transceivers to provide particular dedicated channels for a particular mobile station; and
 - separately providing particular broadcast channels for said particular mobile station from another one of said plurality of transceivers;
- wherein a radio resource used to provide the particular dedicated channels remains unchanged as a result of the dynamic switching between the preferred ones of the plurality of transceivers.

86-94. (Canceled)